

This responds to the August 5, 2005 Office Action in the above-identified application, in which the Examiner imposed a restriction requirement against claims 1-36 pending in the application, between:

- Claims 1-32, drawn to a process system (Group I); and
- Claims 33-36, drawn to a method for operating (Group II).

In response, applicant elects Group I claims 1-32. Such election is WITH TRAVERSE.

The traversal is based on the fact that the stated grounds for the restriction do not comport with the requirements of the 35 USC 121, which requires that:

"[I]f two or more independent and distinct inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions."

The statute therefore requires as a basis for legally permissible restriction that the subject matter of respective claims be both independent and distinct.

Claim 1 is set out below for ease of reference:

"1. A semiconductor process system adapted for processing of a material therein, said system comprising: a sampling region for the material; an infrared radiation source constructed and arranged to transmit infrared radiation through the sampling region; a thermopile detector constructed and arranged to receive infrared radiation after the transmission thereof through the sampling region and to responsively generate output signals correlative of said material; and process control means arranged to receive the output signals of the thermopile detector and to responsively control one or more process conditions in and/or affecting the semiconductor process system, wherein said infrared radiation is transmitted along a transmission path that is substantially linear, and wherein said infrared radiation source and said thermopile detector are aligned along the transmission path of said infrared radiation." (emphasis added)

Claim 33 recites:

"33. A method of operating a semiconductor process including processing of or with a material, said method comprising transmitting infrared radiation generated by an infrared radiation source through a sampling region containing said material, receiving the transmitted infrared radiation with a thermopile detector, generating an output from said thermopile detector indicative of concentration of a desired component of said material, and controlling one or more conditions in and/or affecting the semiconductor process, in response to said output, wherein said infrared radiation is transmitted along a transmission path that is substantially linear, and wherein said infrared radiation source and said thermopile detector are aligned along the transmission path." (emphasis added)

It is apparent from comparison of claims 1 and 33 that the subject matter of these claims includes as common subject matter:

- a sampling region for the material;
- an infrared radiation source transmitting infrared radiation through the sampling region;
- a thermopile detector receiving infrared radiation after the transmission thereof through the sampling region and responsively generating output related to the material; and
- control of one or more conditions in and/or affecting the semiconductor process, in response to the output,
- wherein said infrared radiation is transmitted along a transmission path that is substantially linear, and wherein said infrared radiation source and said thermopile detector are aligned along the transmission path of said infrared radiation.

The Examiner's attention is directed in this respect to the provisions of MPEP Section 802.01 (Meaning of "Independent" and "Distinct"), which states, *inter alia*:

"The term 'independent' (i.e., not dependent) means that there is no disclosed relationship between the two or more subjects disclosed, that is, they are unconnected in design, operation, or effect..."

It is apparent from this provision of the MPEP that the subject matter of Group I representative claim 1 and Group II representative claim 33 is not "independent" within the meaning of 35 USC 121 in the respective claims, and that therefore Groups I and II are NOT properly restricted. In other words, the subject matter of claim 1 and claim 33 CANNOT BE CHARACTERIZED as being "unconnected in design, operation or effect" (MPEP Section 802.01). The restriction requirement applied against Groups I and II therefore is improper.

The Examiner in his statement for the basis of the restriction has conceded that "Inventions Group I and Group II are related as product and process of use." This statement therefore establishes a substantive connection between the Group I claims directed to the process system and the Group II claims directed to the method of operating the process, and under the MPEP criterion quoted in the preceding paragraph, restriction is improper.

Based on all the foregoing, it is requested that the restriction requirement be withdrawn.

Further, it is pointed out that the subject matter of the respective claims imposes no serious burden of searching on the Examiner, particularly since Group II contains only four claims (claims 33, 34, 35 and 36).

According to the MPEP section 803:

"[I]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions." MPEP §803.

Under the applicable criterion of this MPEP provision, the Examiner is required to submit all claims 1-36 to examination on the merits.